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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,966	08/29/2001	Edward Chow		2908

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EDWARD CHOW
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EXAMINER

NGUYEN, TUYEN T

ART UNIT PAPER NUMBER

2832

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/940,966	Applicant(s) CHOW, EDWARD	
	Examiner TUYEN T NGUYEN	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because the abstract should be in *a single paragraph*. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities:

- On page 5, line 14, "end leads 4" should be corrected as --end leads 7--.

Appropriate correction is required.

Claim Objections

Claim 1 is objected to because of the following informalities:

- On line 4, "the said primary and secondary windings" should be corrected as --said primary and secondary windings--. On lines 4-5, "the said cylindrical core" should be corrected as --said cylindrical core--.

Claim 2 is objected to because of the following informalities:

- On line 2, "the single said primary winding" should be corrected as --the single primary winding--.

Claim 4 is objected to because of the following informalities:

- On line 1, "the said secondary windings" should be corrected as --the secondary windings--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, applicant should clarify what is intended by “multiple secondary windings directly wound over each other, *and over the first, single primary windings.*” There is no antecedent basis for “the first, single primary windings.” Claims 2-5 inherit the defects of the parent claim.

Regarding claim 2, applicant should clarify what is intended by “said secondary coils are magnetically induced to produce an electromagnetic force from the single said primary winding by means of *Oersted’s magnetic flux* surrounding any electrical conductors.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, as best understood in view the rejections under 35 U.S.C. 112 second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis [US 1,907,400] in view of Chass [US 3,376,533].

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Davis discloses a transformer [figures 1 and 4] comprising:

- a core structure [10];
- a primary winding [1] wound about the core structure;
- a secondary winding [6] formed of a plurality of windings layers and wound about the primary winding and the core structure;
- lead ends [figure 1] protruding from each of the primary and secondary windings;
- input and output connections [figures 5-7]; and
- a conductive shielding element [4] disposed between the primary and secondary windings.

Davis discloses the instant claimed invention except for the conductive shield element with no end connections and the secondary windings formed of a plurality of windings.

It would have been an obvious matter of design choice, absent evidence of criticality shown in the present invention and the lack of implicit or explicit limit to a specific design in the prior art, to provide the shielding element with no end connections, since applicant has not disclosed that shielding element having no end connections solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the shielding element of Davis end connections. It is noted that it is a truism that a claim need not be limited to a preferred embodiment. *Ethicon*, 93 F.3d at 1582 n.7, 40 USPQ2d at 1027 n.7 (quoting *In re Vickers*, 141 F.2d 522, 525, 61 USPQ2d 122, 125 (CCPA 1944)). However, it is pointed out in that opinion that the applicant "was free to draft claim[s] broadly (within the limits imposed by the prior art) to exclude the lockout precise location as a limitation of the claimed

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invention" only because he "did not consider the precise location of the lockout to be an element of his invention." Id.

Chass discloses a transformer assembly comprising a plurality of secondary windings [12, 14, 16] connected in series, wherein the secondary coils disposed in a spaced relation via flanges [32, 34, 36 and 38] of a bobbin structure [30].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the secondary winding design/connections of Chass in Davis for the purpose of improving the performance of the transformer.

Regarding claim 3, the specific dimension of the gaps would have been an obvious design consideration for the purpose of improving heat dissipation.

Response to Arguments

Applicant's arguments filed 12/10/03 have been fully considered but they are not persuasive.

Applicant argues that:

[1] Regarding to 35 U.S.C. 112 second paragraph rejections, "this present art has gone far beyond the theoretical stages, with extensive laboratory ..." and "An important aspect of this present converter is to provide flexible wattage levels from such art by the manner in which the multiple coil leads are connected, ie: all secondary coils in series, or parallel"

[2] Davis fails to disclose multiple secondary windings; and

[3] Chass is a non-analogous art. Chass's art is essentially linear in nature and not radially wound coils as in the present art.

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The examiner disagrees.

Regarding [1], applicant has not correct the claims to overcome the 35 U.S.C. 112 second paragraph requirement.

Regarding [2], Davis discloses a secondary winding [6] formed of a plurality of windings layers and wound about the primary winding and the core structure. Chass discloses a transformer assembly comprising a plurality of secondary windings [12, 14, 16] connected in series, wherein the secondary coils disposed in a spaced relation via flanges [32, 34, 36 and 38] of a bobbin structure [30]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the secondary winding design/connections of Chass in Davis for the purpose of improving the performance of the transformer.

Regarding [3], in response to applicant's argument that Chass is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Davis and Chass discloses a transformer with primary and secondary windings radially wound about a core structure. A skilled artisan would have been motivated to use multiple secondary windings design of Chass for the purpose of improving the performance.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T NGUYEN whose telephone number is 703-308-0821. The examiner can normally be reached on M-F 8:30-6:30.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TTN TTN

Tuyen T. Nguyen